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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/651,438	08/30/2000	Kevin Garcia	002950.P043	2551

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EXAMINER

HOANG, PHUONG N

ART UNIT	PAPER NUMBER
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2126

DATE MAILED: 09/23/2003

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Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/651,438

Applicant(s)

GARCIA, KEVIN

Examiner

Phuong N. Hoang

Art Unit

2126

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 07 July 2003.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1 - 18 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1 - 18 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. §§ 119 and 120**

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

**Attachment(s)**

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_\_.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

## DETAILED ACTION

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

1. Claims 1 – 8, 17, and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Dzikewich US patent no. 5,706,500, and in view of Horiguchi US patent no. 6,073,157.

**As to claim 1**, Dzikewich teaches automatically detecting exit (automatically detecting failure, col. 5 lines 52 - 58) of a child application object (units of works 132-138) col. 5 lines 50 - 65, attempting restart (restarted, col. 4 – line 5 - col. 5 line 60) of the child application, signaling (signaling, workflows, col. 4 lines 23 – 26, col. 3 lines 35 – 50, and col. 5 lines 30 - 50) an outcome of the restart to a parent application (processor 100, col. 5 lines 30 - 50).

Dzikewich does not teach automatically terminating grandchild application object.

Horiguchi teaches automatically terminating (automatically terminate, col. 32 lines 37 - 50) grandchild application object (threads, col. 5 lines 30 - 45 and col. 6 lines 45 - 55) launched by the child application object (enclave).

It would have been obvious to apply the teaching of Horiguchi to Dzikewich's system to make the parent to have a grandchild because it is a hierarchy relationship.

**As to claim 2**, as modified by Dzikewich in claim 1 teaches maintaining (either restarting or terminating) an application hierarchy.

**As to claim 3**, as modified by Dzikewich teaches maintaining application hierarchy includes launching (start the parent application).

**As to claim 4**, Dzikewich teaches if the restart of the child application is successful (when the transaction system has been restarted, .... if these data .... successfully, col. 4 lines 10 – 22) then communicating a restart message to the parent application object to inform (processing state 152, col. 4 lines 10 – 22) the parent application.

**As to claim 5**, this claim is opposite with claim 4.

**As to claim 6**, one skilled in the art can recognize that detecting of the failure would include detecting hanging of a process.

**As to claim 7**, Dzikewich teaches automatically determining whether the exit of the child application was expected (if the restart follows after the completion of unit, col. 5 line 60 – col. 6 line 6), and only attempting the restart if the exit was unexpected (a restart due to a system failure).

**As to claim 8**, it would have been obvious to modify the system to create a new process identifier for a process.

**As to claim 17**, this is product claim of claim 1, see claim 1 above.

**As to claim 18**, this is system claim of claim 1, see claim 1 above.

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2. Claims 9 - 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Dzikewich US patent no. 5,706,500, in view of Horiguchi US patent no. 6,073,157, and further in view of Matsuda US patent no 5,790,419.

**As to claim 9**, see claim 1 above.

Dzikewich as modified claim do not teach a watchdog.

Matsuda teaches a watchdog (watchdog, col. 4 lines 16 – 30).

It would have been obvious to apply the teaching of Matsuda to Dzikewich's system because watchdog is a mechanism to detect failure.

**As to claim 10 – 16**, see claim 2 – 8 above respectively.

### ***Response to Arguments***

3. Applicant's arguments filed on 7/7/03 have been fully considered but they are not persuasive.

Applicant argued:

On claim 1, 17 and 18, Horiguchi fails to teach automatically terminating a grandchild application object launched by the child application object, attempting a restart of the child application object, or signal an outcome of the restart to a parent application object that launched the child application object, automatically detecting the exit of the child application object (page 8 lines 7 – 12 and page 9 lines 5 – 10).

Dzikewich does not discuss the attempt to restart the child application object nor does Dzikewich discuss signaling an outcome of the restart to a parent application object that

launched the child application object (page 8 lines 23 – 27). There is no hierarchical relationship among processes, threads (page 9 lines 18 – 20).

On claim 9, Matsuda does not discuss an executor automatically terminating a grandchild application object launched by the child application object, attempting a restart of the child application object, or signal an outcome of the restart to a parent application object that launched the child application object. Matsuda does not teach a watchdog automatically to detect the exit of a child application (page 10 lines 14 – 20). Matsuda does not discuss a child application object (page 10 lines 23 – 25), and Matsuda does not detect an exit of a child application on Horiguchi referent (page 10 lines 25 – 27).

In response:

On claim 1, 17, and 18, applicant is conflicted by arguing Dzikewich does not teach automatically detecting the exit of a child application (page 9 lines 7 – 8) while having admitted that Dzikewich teaches automatically detecting the exit of a child application such as the units of work (page 8 lines 20 – 22).

Back to col. 3 and 4 to see the whole loop from steps 1 - 7, the event processor restarts the script 130 to run unit of work which is the child application object. The transaction manager provides the message flows which is a signal to the event processor 100 when to restart the units of work (In step 2, subsequent to step 1a or step 1d, the business processor 100 starts or restarts, determined by ..... to be processed, col. 4 lines 23 – 26 and col. 3 lines 35 – 50).

It is the combination of Horiguchi and Dzikewich, not each alone, teaches claim 1 “ automatically terminating a grandchild application object launched by the child application object, attempting a restart of the child application object, or signal an outcome of the restart to a parent application object that launched the child application object, automatically detecting the exit of the child application object” (see rejection above).

The hierachicy relationships between parent, child, and grandchild between as claimed are: the parent is process, child is enclave, and thread is grandchild (A process comprises one or more enclaves, and enclaves are permitted to have multiple threads, col. 3 lines 37 – 50).

On claim 9, it is the combination of Dezikewich, Horiguchi, and Matsuda, meets claim 9, not any of them alone. Examiner did not cite Matsuda teaching automatically terminating a grandchild application object launched by the child application object, attempting a restart of the child application object, or signal an outcome of the restart to a parent application object that launched the child application object, detecting an exit of a child application. Matsuda teaches the watchdog provides abnormally detecting the state of the mircrocomputer 14 (col. 4 lines 16 – 20), and by definition (Mircosoft Computer Dictionary), it is a device (usually a timer or driver) used to monitor continuing system and functionality communications with the system software using a dedicated device driver. Again, it is combined with Dezikewich's system which uses the watchdog as a device to detect the exit of a child application.

***Conclusion***

**4. THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Phuong N. Hoang whose telephone number is (703) 605-4239. The examiner can normally be reached on Monday - Friday 9:00 am to 5:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Follansbee can be reached on (703)305-8498. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703)746-7140.



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Ph

September 15, 2003.

A handwritten signature in black ink, appearing to be 'JF', written in a cursive style.

JOHN FOLLANSBEE  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 2100